

jewel-weed, no other method of introduction is conceivable in this case.—C. A. W.

UNDER WHAT CONDITIONS DOES *DRYOPTERIS DILATATA* GROW?—I am glad Mr. Clarkson has returned to the discussion of the *Dryopteris dilatata* problem, even though the result in part is to indicate that I have been inaccurate in using the terms “alpine or sub-arctic” when I should have used the ecological term “Canadian forest” as characterizing the habitat of *dilatata*. Also, instead of the term “cold regions,” it would be more accurate to describe the climatic condition as “cool and damp.” With these corrections, I should like again to raise the question whether *dilatata* is not practically confined to regions in which moisture is generally abundant in the atmosphere. Such conditions are found at low altitudes in England, in Denmark, in our Pacific states north of San Francisco, and also along the North Atlantic coastal regions. Inland, however, and farther south, *dilatata* usually finds favorable conditions only at considerable altitudes where clouds and fog supply the needed atmospheric moisture.

In Mr. Clarkson's discussion regarding the European distribution of this fern, I note as of pertinence in this connection that the Moore quotation mentions the “Savoy Alps,” though not otherwise informative regarding the distribution in altitude. In an earlier paper I have already referred to correspondence from a South German fern student to the effect that *dilatata* is in his region confined to higher altitudes, with *spinulosa* the species occurring at lower ranges. It seems to me that we still need discriminating comment regarding the distribution of *dilatata* ecologically in Europe. To consider the geographic ranges alone is likely to be misleading.—R. C. B.